TACTING "TO A FAULT"

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The thesis is that behavior analysis is technological to a fault. Perhaps the simplest, most fundamental response is to note the proper meaning of the word *technology*, from which it follows that you cannot be technological to a fault. You *can* have a faulty technology. The way in which technology can be faulty is to be incomplete. An incorrect technology is an oxymoron. A technology that does things an audience dislikes is not a faulty technology; the point of a technology is to accomplish that at which it is aimed, and the point of an audience is to choose at what to aim.

I find two major functions of technology in the disciplines of empirical science. One is to make observation and measurement valid and reliable; the other is to make things work reliably. Some disciplines are not about making anything work, but instead are about noting regularity, order, and predictability. Astronomy and most of meteorology, sociology, and anthropology are examples; they need and develop mainly measurement technologies. Some disciplines are about making things work; they need and develop both technologies. Physics, chemistry, engineering, business administration, and medicine are notable examples. However, a few of the disciplines that must make things work cannot yet get all their things to work very reliably; perhaps the most notable examples for present purposes are the social, behavioral, and management sciences. The interesting question is what stimulus function that current partial failure of technology has in those sciences.

In the natural sciences, as best I know their histories, failures to control their subject matter have had two stimulus functions: One was to set the occasion for developing real-world procedures that

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would yield better control. When those procedures succeeded they were, of course, labeled technology. The second was to set the occasion for theorizing, mainly to explain why current technology was still as unreliable as it was. Of course, that was not the avowed function of theory, but I claim that it usually was the underlying function.

In my opinion, these two functions were most often inverses. The development of better control usually took time, effort, resources, and imagination; the development of a theoretical explanation of why current technology did not always succeed required less imagination, far less time, even less effort, and virtually no resources. Perhaps that was why theory development usually preceded technology development, and why theories that were developed in the absence of better experimental control so often faded away when that control was finally achieved. True, the stereotypic account of science says that good theory precedes and enables better experimental control. Clearly, that does happen sometimes. However, in my opinion, the reverse is much more common.

If the question is whether behavior analysis too often answers current failures of experimental control by striving for better experimental control, and too rarely answers current failures of experimental control by inventing theoretical explanations for that failure, then I must ask for a criterion of "too." I suspect the underlying question is about how variously we choose those criteria. I propose a behavior-analytic way of discussing them: Let us extrapolate how different proportions of those two endeavors (striving for better experimental control vs. inventing theories to explain why our current control is imperfect) will lead to different kinds of behavioral science; then we can ask ourselves and our audience if we recognize in those outcomes some reinforcers or some punishers. We can then recommend the proportions of theory and striving for

better control that maximize our reinforcers and minimize our punishers. And after that we can discover how little behavioral function recommendations have.

If that is my recommendation, then perhaps *I* should begin. I can report that my behavior is much better reinforced by achieving experimental control over what I study than by achieving a theoretical explanation of why I sometimes fail to achieve that experimental control. However, my behavior is also a little better reinforced by a theoretical explanation than by neither experimental control nor explanation. Thus, I have done a lot of the former and some of the latter (mainly when asked—e.g., the present case).

Should I invent reasons (theory?) as to why my reinforcers fall in that rank order? As if such reasons might better convince a reader than would the mere truth about my behavior? Try the following, but remember that they are only rationalizations.

History. I claim that natural science has advanced to the forms in which we now teach it, more through the achievement of better and better experimental control than through the development of theory.

Survival. I claim that our society is more likely to survive through the development of better behavioral technology than by the development of theory about why our current behavioral technology is still not saving us from self-destruction. In particular, I claim that when we strive for better experimental control over society's adoption of behavioral programs, the results will make it easier to choose among the many current theories about why society does not use knowledge to save itself.

Profession. I guess that the earth contains roughly 500,000 psychologists and 5,000 behavior analysts. I claim that the most distinctive feature of the behavior analysts is their devotion to achieving better and better experimental control of what they study, whereas the most distinctive feature of the psychologists is their devotion to achieving theoretical explanations for all current failure to do so (especially explanations that will bear their name) and that, among these, theories that blame the victim rather than the programmer are the more

desired. In that case, why compete in a professional market already saturated with people better trained for that kind of production?

Victim blaming per se. Interestingly, theoretical reactions to incomplete technologies sometimes blame technology per se, as if to assert that the reason a technology is incomplete is that it is only a technology, and thus that we shall remain forever incomplete as long as we rely on technology. But for what do we rely on technology? Only to accomplish what we have decided to accomplish. If there is a flaw, it is either that the technology does not accomplish all of what we desire, or that we do not desire enough of the right things (the things desired by someone else), or that we desire the wrong things (the things disliked by someone else), or some of that, or all of that. That form of argument against technology is at least topographically similar to arguing that the powerless are powerless because they are not assertive, which we establish through questionnaires. Power can be asserted, and yet in their cases it is not. Thus, they are powerless because they are not assertive, which we know because they say so if asked, which we claim are valid measures because people who say that are typically powerless. Thus, some people are powerless because they are powerless. That is victim blaming (and also tautology).

Similarly, is the argument that we fail to accomplish all we wish because we are technological to a fault? And how do we know that we are technological to a fault? It had better not be simply that we say we are technological and also say we are not accomplishing all that we wish. But perhaps a certain amount of that kind of argument was the impetus for this particular journal symposium.

Logic. I claim that radical behaviorism is already an exceptionally thorough and comprehensive theoretical account of behavior, one that, more than any other, not only presses its students to value better and better experimental control over any behaviors amenable to it but also teaches them how to approach that goal—and then teaches them to analyze approach behavior, and then choice behavior, and then the verbal behavior we use when we tact goals. It seems to me that radical behav-

iorism recommends reserving merely conceptual control only for those behaviors not amenable to experimental control. I argue that radical behaviorism requires mainly internal elaboration of all that is logically implicit in its principles rather than addition and revision.

But I have no proof of any of that, as none of us has or will have, and so the readers of this symposium would do better not to be convinced by any of it. Which is to say, I would like it better if they did not tact conviction under these stimulus conditions. Which in turn is to say, I would respond to switch out of a chain in which the terminal link was that kind of tacting and into a concurrent chain in which the terminal link was tacting abstention from that kind of tacting. But for any audience not responsive to the tacts of concurrent chains, I return to "I would like it better if they did not tact conviction under those stimulus conditions."

If these critics were students in my researchmethods class, I might arrange stimulus controls and contingencies to insure that they did not tact conviction under such stimulus conditions. If I knew how to do that effectively, I would be technological, wouldn't I? To a fault? Perhaps the critics who would say so mean only that they would teach research methods differently, or would teach different research methods, perhaps based on different standards of when to tact the word *proof*. But why blame teaching technology for that difference? A complete teaching technology would simply make the teaching of any such standards more effective. For those critics who decry effective teaching per se as either illiberal or poor preparation for life in the real world of having to teach yourself most things, a complete technology would also show them how to teach as ineffectively as controls their tacting of satisfaction.

Perhaps readers should simply see if any of this reminds them of how their reinforcers are rank-ordered. Then, if they are ever pressed for rationalizations of what they are going to do and not do anyway, rationalized or not, they can offer their individual choices from these and the many others this symposium offers.

Received March 10, 1991 Final acceptance May 7, 1991 Action Editor, E. Scott Geller